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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,263	07/14/2003	Masanori Takebe	042715-5008	3916

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EXAMINER

ORTIZ, ANGELA Y

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,263

Applicant(s)

TAKEBE ET AL.

Examiner

Angela Ortiz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ziegler, USP 4,459,256 in view of Jap. Ref. 7-88884 (of record) for the reasons cited in the previous office action.

The cited primary reference substantially teaches the basic claimed method of molding a double-colored key top wherein a first resin of a first color is molded within a first molding cavity. Note that the first molding can receive a convex pattern for a decorative effect, including letters, numbers, symbols and the like. The first molded plastic is adjusted to its outermost position within the molding cavity to form a second cavity, and a second plastics material of a second color is injection molded onto the back side of the first molded plastic such that the second patter flows into and around the convex pattern. See col. 2, lines 1-10, 42-68; col. 3, lines 30-47; claims 1-6, and figures 8-12.

The cited primary reference does not teach use of light-transmitting (or light-permeable) and light-shielding materials as claimed.

The added secondary reference teaches as conventional the feature of forming a two-color key top as claimed, wherein the resin materials used are light transmitting and light-shielding and form an improved key-top with the ability to check the weld at the

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interface. The detailed process steps include providing a first material as a light-transmission nature resin for a first shot in fabricating the two-color keytop, and a second resin material as an optical cover material (or light-shielding resin) for a second shot in molding the keytop. See the detailed description in the translation provided, and paragraphs [0029-0033].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use light transmitting and light shielding resins as shown in the added reference, when performing the process set forth in the primary reference, for achieving a light effect with the improved molded keytop, and for checking the weld at the interface.

With respect to claim 2, note that gate holes are provided in the primary reference; see figures 8 and 10 of USP 4,459,256.

With respect to claim 3, while the limitations are not understood, note that the added reference teaches a depth range of the character/symbol of the key top at paragraph [0039].

Response to Arguments

Applicant's arguments filed 15 December 2004 have been fully considered but they are not persuasive.

Applicant argues that a prima facie case of obviousness has not been met.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the primary reference teaches making a key-top in two molding steps, using a two-color injection molding method wherein the two materials are welded at an interface; the secondary reference teaches an improved two-material key-top using light transmissive or shielding materials that are also welded at their interface, the improvement including the ability to check the weld; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use light transmitting and light shielding resins as shown in the added reference, when performing the process set forth in the primary reference, for achieving a light effect with the improved molded keytop, and for checking the weld at the interface.

The applicant argues that the Zeigler reference teaches opaque materials and teaches away from light transmitting material and cannot be combined with the Jap. Ref. Note that reconsideration has been given to the Ziegler reference, and the teaching of colored resins is noted, but no conclusive teaching that the resins are opaque as argued. See for example, col. 2, lines 59-65 and col. 3, lines 40-47 and col. 4, lines 1-2. The reference is silent to the opacity of the resins, and can be combined with a reference teaching light transmitting and light shielding as set forth in the added reference.

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With respect to the claimed sequence of steps, note that the added reference teaches providing a first material as a light-transmission nature resin for a first shot in fabricating the two-color keytop, and a second resin material as an optical cover material (or light-shielding resin) for a second shot in molding the keytop. See the detailed description in the translation provided, and paragraphs [0023, 0030-0033]. Note that the primary reference shows molding an outer cover and then an inner layer as claimed, see col. 2, lines 42-68.

With respect to the features of light-shielding and light permeable, note that the instant specification teaches at page 1, lines 14-16 that the terms "a light-shielding resin layer [as a] (non-light-transmittable layer)and a light-permeable resin layer [as a] (light-transmittable layer)".

The cited references, particularly the added secondary reference teaches the use of conventional plastic materials of like properties at paragraph [0009] of the translation (of record).

The rejection stands.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not


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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela Ortiz whose telephone number is 571-272-1206. The examiner can normally be reached on Monday-Thursday 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaiani can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Angela Ortiz
Primary Examiner
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